### **Evaluation Report**

## Technology Opportunities Program 1996 and 1997 Projects

Study Conducted by:

Johnson & Johnson Associates, Inc.

For
U.S. Department of Commerce
National Telecommunications & Information Administration

#### TECHNOLOGY OPPORTUNITIES PROGRAM 1996 AND 1997 PROJECTS

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#### LIST OF ACRONYMS \_\_\_\_\_

JJA—JOHNSON & JOHNSON ASSOCIATES, INC.

NTIA—NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

TIIAP—TELECOMMUNICATIONS AND INFORMATION INFRASTRUCTURE ASSISTANCE PROGRAM

TOP—TECHNOLOGY OPPORTUNITIES PROGRAM

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California Science Center Foundation

Caracole, Inc.

City of Philadelphia Mayor's Office of Information Services

City of Tucson Police Department

Dallas County Community College District

Denver Public Library

District of Columbia Public Schools

Eastern Maine Development Corporation

Eastmont Computing Center/ OCCUR

Florence-Darlington Technical College

Florida Department of Agriculture & Consumer Services

Foundation for Educational Innovation

Greater Los Angeles Council on Deafness, Inc.

Independent School District #196

Kentucky Rural Telecommunications Center Inc.

Laredo Community College

Louisiana Commission on Law Enforcement

Michigan Public Health Institute

Mid-America Assistance Coalition

Monmouth-Ocean Hospital Service Corporation

National Urban League, Inc.

New York Public Library

North Carolina Justice and Community
Development Center

North Carolina School of Science and Mathematics

Oregon State Offices for Services to Children and Families

Palouse Economic Development Council

The Pennsylvania State University

Rogers Independent School District

South George Street Community Partnership Inc.

Southeastern Library Network

Southwest Louisiana Hospital

Spartanburg Technical College

United Way of Southwest Alabama, Inc.

University of Illinois

University of South Dakota School of Medicine

University of Wyoming

Valley City State University

Very Special Arts Massachusetts, Inc.

Wayne Community Schools

Western Kansas Community Services Consortium

WVHTC Foundation

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#### PURPOSE, STRUCTURE, AND USE OF THIS REPORT

This report provides an evaluation and analysis of selected Technology Opportunities Program (TOP) grants that were awarded by the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA). This report evaluates TOP grants funded during the years of 1996 and 1997 that were no longer receiving funding as of June 2000, in particular, 1996 projects that were not surveyed in 1999 and that had been completed between January 1999 and June 2000, and 1997 projects that had been completed during the same period. The evaluation and key findings contained in this report summarize the results of a survey that was administered to the grant recipients between August and December of 2000.

The report is organized into four sections: Section one provides an executive summary of the report focusing on the key findings, lessons learned, and impact of the TOP grants. Section two provides an overview of the TOP program, its mission, and goals, and also provides an overview of the study objectives, the methodology utilized to conduct the survey, and the survey design. The section also provides an introduction to the grantee organizations. Section three provides the key findings and the analysis of survey data related to each of the eight primary sections of the survey. This section includes 34 data tables which are designed to report the results of the survey analysis. All significant findings have been represented and discussed in the tables and text of this section. Please note that many of the tables report percentages which incorporate rounding based on standard rounding rules. Section four provides lessons learned, recommendations, and study conclusions.

This report is recommended for use by the NTIA management and other stakeholders of TOP:

**LEVEL ONE:** The content of this report provides an evaluation of the TOP program,

focusing on project outcomes, implementation, sustainability, impact,

replicability, and partnerships.

**LEVEL TWO:** The content of this report, when used in conjunction with similar

reports from previous years, provides the opportunity for trend

analysis and comparative performance assessment.

**LEVEL THREE:** The content of this report can be used internally by NTIA as a baseline

for strategic, tactical, and operational planning; goal setting; and continuous performance improvement. It can also be used externally by grant recipients for the development of proactive strategies and

action plans for improving the outcomes of TOP grants.

**LEVEL FOUR:** The content of this report is also recommended for use by

organizations interested in applying for and receiving TOP grants, to help them to better understand the purpose, use, and value of TOP

grants.

#### SECTION 1.0 EXECUTIVE SUMMARY AND KEY FINDINGS

The objective of this U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA), Technology Opportunities Program (TOP) grant evaluation study was to examine project accomplishments, effectiveness, and lessons learned from selected TOP grants funded in 1996 and 1997 that were no longer receiving funds as of June 2000. A total of 48 TOP projects were eligible for participation in the study. Contacts were identified for all 48 grant projects and a comprehensive survey was sent to each by email or fax. Forty-two (42) surveys were returned achieving an 89.3% response rate. The survey responses were analyzed quantitatively and qualitatively to identify key findings related to project outcomes, implementation, sustainability, technology, impact, evaluation, community involvement, and project dissemination. Eight key findings, supported by statistics, are documented in this report. The key findings are summarized in Table 1.0-1.

Table 1.0-1: Results of Key Findings and Statistics of Grantee Surveys

KEY FINDING	KEY FINDING STATISTICS
Outcomes: TOP grant projects improved services	93% of respondents reported serving
provided to disadvantaged and underserved	disadvantaged and/or underserved populations.
populations, provided learning and training	• An average of 80-90% of the respondents
opportunities, and removed technological barriers.	reported meeting or exceeding each outcome.
On average, almost all respondents indicated	86% of respondents reported addressing
achieving outcomes at or above expected levels.	technological barriers.
Implementation: TOP grantees proposed and	On average, 80% of the responding TOP grantee
implemented a wide variety of planning, access,	organizations implemented their projects at a
technology, and training activities to achieve their	level that met or exceeded what was proposed.
objectives. Most projects were noted as generating spin-	• 62% of respondents indicated the existence of
off activities, which are additional services not proposed	spin-off activities that resulted in a total of
in the original TOP proposal. The most common	\$35.5M in additional funding across all
obstacles or impediments experienced were the	projects.
underestimation of planning time, inadequate or under-	• 74% of respondents underestimated the amount
qualified staffing, and lack of commitment and follow-	of effort/time required; 57% noted inadequate
through.	or under-qualified staffing; and 50% indicated
	a lack of commitment and follow-through on
	the part of partners and/or community
	stakeholders.
Sustainability: Eighty-eight percent of survey	88% of the responding TOP projects remained in
respondents reported sustainability through 2000, and	operation at the time of the survey.
remain in operation. Factors cited for project growth and	
expansion included additional funding, private sector	period ended.
support, as well as staff and partner commitment and	• Five of the forty-two projects have ceased service.
collaboration. Reasons cited for lack of project	Tive of the folia two projects have coulded service.
sustainability include personnel changes and lack of	
funding.	
Impact: TOP grant funding served as a primary	• 67% of the responding grantees estimated that
enabler of project implementation, resulting in the	projects would never have been implemented
projects' ability to increase their range of services and	without TOP funds.
expand the number of people served, while	Of the 33% respondents that felt their project
accelerating project implementation.	would have been implemented without TOP
	funds, nearly all noted that the number of people
	reached by the project would have decreased, that the project would have been delayed, and that the
	range of services offered would have decreased.
	range of services offered would have decreased.

Table 1.0-1: Results of Key Findings and Statistics of Grantee Surveys Continued

Table 1.0-1. Nesults of Ney Findings and Statisti	<u>.                                    </u>
Community Involvement: TOP grant projects surveyed partnered with an average of 18 other	98% of the responding grantee organizations     partnered with other organizations, of which 62%
	developed new partnership relationships.
organizations to achieve project goals.	
	• 64% of the responding grantee organizations
	indicated partnering with educational institutions.
	• 64% of the responding grantee organizations also
	indicated partnering with government agencies.
<b>Technology:</b> TOP grant funding enhanced various	83% of the responding grantee organizations
types of telecommunications technology and services	reported that their projects used digital services.
offered to grantee project end users.	• 77% of respondents noted that planned technology
	resource needs were met.
	69% of respondents helped end users obtain access
	to the Internet.
	64% of respondents indicated that their projects
	made personal computers available to end users.
<b>Evaluation:</b> The TOP grant projects surveyed used a	90% of the project data evaluated is related to end-
variety of methods to measure end-user satisfaction	user satisfaction and 81% to project benefits for end
levels, evaluate effectiveness of resources and	users.
services offered, and determine overall project	79% of respondents indicated that they had
benefits.	completed an evaluation report.
	Participant observations (79%) and surveys (76%)
	were the most frequently cited methods of evaluation
	utilized for data collection.
<b>Project Dissemination:</b> Grantees strongly agreed	96% of respondents agreed that their project
that their projects would serve as replicable models	innovation was advantageous, and 93% of project
to other organizations, and that innovations	grantees indicated agreement that these
introduced by their projects could be adopted by	advantages were easily documented,
	demonstrated, and communicated to others.
other organizations.	• 95% of the responding grantee organizations
	indicated that their projects might serve as
	replicable models.
	On average, thousands of organizations were
	receiving information on each project through
	Internet web sites and thousands more through
	marketing efforts and advertising.

The survey results indicated that TOP grant projects were highly effective in meeting their project goals as a direct result of TOP grant funding. To date, TOP has awarded 456 grants, in all 50 states, the District of Columbia, and the U.S. Virgin Islands, totaling \$149.7 million and leveraging \$221 million in local matching funds. It was evident that the projects implemented with TOP grant funds served to improve the quality of, and the public's access to, education, health care, public safety, and other community-based services. In addition, project grantees shared lessons learned and valuable information regarding their projects with other organizations. The extensive partnering by grantee organizations led to the implementation of similar projects or project-related ideas by other organizations, further extending the effects of TOP grant funding.

### SECTION 2.0 OVERVIEW OF TOP, STUDY OBJECTIVES, METHODOLOGY, AND APPROACH = 2.1 OVERVIEW OF THE TECHNOLOGY OPPORTUNITIES PROGRAM

The U.S. Department of Commerce Technology Opportunities Program (TOP), formerly the Telecommunications and Information Infrastructure Assistance Program (TIIAP), promotes the widespread availability and use of digital network technologies in the public and nonprofit sectors. Since 1994, TOP, administered by the National Telecommunications and Information Administration (NTIA), has provided grants for model projects demonstrating innovative uses of network technologies. TOP provides matching grants to non-profit organizations to fund projects that demonstrate how digital networks support lifelong learning for all Americans; help public safety officials protect the public; assist in the delivery of health care and public health services; and foster communication, resourcesharing, and economic development within rural and urban communities. TOP projects are nationally significant demonstrations of how digital network technologies can be used to extend and improve the delivery of valuable services and opportunities to all Americans, especially the underserved. TOP's benefits are broadly distributed across the country, especially in rural and underserved communities. By working closely with grantees, TOP accumulates and reports a significant body of knowledge about the creation and use of information technology applications. Lessons learned are captured periodically from grant recipients and shared with the public through publications, newsletters, and the TOP web site. To date, TOP has awarded 456 grants, in all 50 states, the District of Columbia, and the U.S. Virgin Islands, totaling \$149.7 million and leveraging \$221 million in local matching funds.

#### 2.2 STUDY OBJECTIVES, METHODOLOGY, APPROACH, AND INSTRUMENT

NTIA contracted with Johnson & Johnson Associates, Inc. (JJA), an independent consulting, training, and research company, to conduct a study of the TOP grants funded in 1996 and 1997 that were no longer receiving funds as of June 2000, in particular, 1996 projects that were not surveyed in 1999 and that had been completed between January 1999 and June 2000, and 1997 projects that had been completed during the same period. The study focused on identifying the effects and impacts that funded projects were having on promoting widespread availability and access to network technology, particularly in underserved communities. The study was designed to evaluate outcomes, accomplishments, problems, lessons learned, partnerships, technological approaches, expansions, spin-offs, sustainability, replicability, and dissemination activities directly related to the TOP project activities and outcomes. The resulting report can be used by all interested parties, individuals, and organizations to expand knowledge and understanding of the impacts, key success factors, and lessons learned by grantee organizations.

A total of 48 TOP projects were eligible for participation in the study. The study methodology involved the identification of TOP project contacts who were qualified to respond to the survey; the administration and evaluation of a comprehensive, 21-page, 47-question survey; and the development of the study report. Initial contact was made with a representative from each project, and the survey was sent to the identified 48 TOP project contacts via e-mail and facsimile in August of 2000. Forty-two (42) of the 48 surveys were returned achieving an 89.3% response rate. Initial contact was attempted with all six of the grantee organizations that did not participate in the survey. In two cases, the key contacts for the projects were no longer in their positions and current staff could not fill out the survey, three grantee organizations never responded to phone calls or mail, and one organization was contacted repeatedly but never returned the survey.

The survey consisted of eight sections, each designed to evaluate a different aspect of the TOP project accomplishments, and one additional section designed for reporting general information on the grantee organization. The eight main sections were as follows:

- **Project Outcomes:** This section consisted of ten questions designed to evaluate the types of outcomes projected and achieved by each grantee.
- **Project Implementation:** This section consisted of nine questions designed to evaluate proposed activities and strategies, as well as obstacles, impediments, and project spin-off activities.
- **Project Sustainability:** This section consisted of three questions designed to evaluate the current status of operation, including diminished operation, and growth and expansion.
- Impact of TOP Grant: This section consisted of four questions that prompted the grantee to estimate the consequences of not receiving the TOP grant funds.
- Community Involvement: This section consisted of five questions designed to identify the types and numbers of partnering organizations, services, and resources provided by external entities.
- **Project Technology:** This section consisted of six questions designed to evaluate types of telecommunications technologies, services, and devices that projects access and use.
- Project Evaluation: This section consisted of three questions designed to identify the types of data collection methods used and the types of data collected by projects to evaluate performance.
- **Project Dissemination:** This section consisted of five questions designed to identify the breadth and methods of dissemination of project information and the impact of disseminating that information.

A copy of the survey is provided in Appendix A of this report. All survey data was entered into a database for analysis, the results of which are provided in Section 3.0 of this report.

#### 2.3 OVERVIEW OF GRANT RECIPIENT ORGANIZATIONS

The 42 grant recipients who responded to the survey represented a variety of organizations, including health care, education, public safety, governmental, and community organizations. Figure 2.3-1 provides a breakdown of the types of participating grantee organizations. The most common organization type represented overall was that of community organizations, representing 18 of the 42 participating organizations. Of the other organizations responding, 16 were education organizations, three were health care organizations, three were public safety organizations, and two were governmental organizations. The participating organizations in the community category represented a variety of community organizations, including social service agencies, libraries, cultural entities, community development, and other organizations. The participating educational organizations included higher education institutions and K-12 school systems. The participants from the health care organizations included one medical school and one hospital. Law enforcement agencies and fire and rescue agencies

were represented under the public safety organization category. Two state government agencies were also represented.

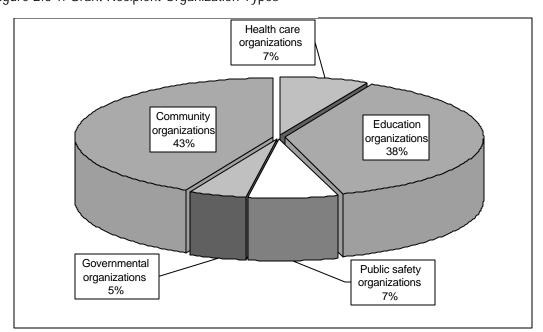


Figure 2.3-1: Grant Recipient Organization Types

#### SECTION 3.0 STUDY RESULTS, KEY FINDINGS, AND IMPACT OF TOP G RANT

This study focused on the evaluation of the goals, accomplishments, problems, lessons learned, partnerships, technological approaches, expansions, spin-offs, sustainability, replicability, and dissemination activities directly related to the project and outcomes for TOP grant projects. This section provides the results of the analysis of a survey administered to 42 TOP grant recipients, focusing on key findings and lessons learned. Each of the eight main sections of the survey is discussed in Sections 3.1 through 3.8 with supporting statistics.

#### 3.1 RESULTS AND KEY FINDINGS RELATED TO PROJECT OUTCOMES

#### Key Finding

TOP grant projects improved services provided to disadvantaged and underserved populations, provided learning and training opportunities, and addressed technological barriers. On average, almost all respondents indicated achieving outcomes at or above expected levels.

#### **Key Finding Statistics**

- 93% of respondents reported serving disadvantaged and/or underserved populations.
- An average of 80-90% of the respondents reported meeting or exceeding each outcome.
- 86% of respondents reported addressing technological barriers.

Table 3.1-1 focuses on the expected outcomes and levels of achievement for 16 outcomes, and provides the percent of respondents that indicated they expected to achieve each outcome. In addition, the table presents the percent of respondents that indicated they achieved less than what was expected, exactly what was expected, and more than what was expected. Respondents were able to select as many outcomes as were applicable to their project.

Table 3.1-1: Outcomes and Extent of Achievement

		Extent Outcome Was Achieved If Expected				
Expected Outcomes for Projects (N = 42)	Percent YES	Percent	Percent	Percent	Number	
	1 Groom 120	Less	Same	More	Responding	
Improve training and learning opportunities	81%	3%	38%	59%	34	
Enhance long-term telecommunication needs	71%	13%	47%	40%	30	
Enhance coordination of community -wide information and communication services	67%	7%	46%	46%	28	
Increase sense of community and focus on the common good	64%	12%	38%	50%	26	
Improve delivery of social services	55%	14%	50%	36%	22	
Enhance community development	52%	15%	45%	40%	20	
Increase employment	43%	6%	76%	18%	17	
Enhance economic development	43%	12%	47%	41%	17	
Increase participation in civic affairs	36%	13%	40%	47%	15	
Improve cultural enrichment	33%	0%	64%	36%	14	
Reduce poverty	26%	33%	50%	17%	12	
Improve the quality of health care	26%	0%	58%	42%	12	
Increase family stability	24%	8%	58%	33%	12	
Increase cultural sensitivity and social tolerance	19%	0%	56%	44%	9	
Improve the effectiveness of public safety services	17%	14%	43%	43%	7	
Other	15%	0%	33%	67%	6	
Notes: Survey participants were allowed to select multiple responses			•	•	•	

The views of grantees on various aspects of TOP grant project outcomes, barriers, end users and beneficiaries were assessed. Most frequent project outcomes included enhanced long-term telecommunication needs, enhanced coordination of community-wide information and communication services, and increased sense of community, as was indicated by 60-70% of the survey respondents. TOP projects also resulted in improved training and learning opportunities often implemented in support of successful implementation of new technologies. Over half of the grantees responding also focused on improving delivery of social services and enhancing community development.

For the vast majority of outcomes that were expected by grantees, 80-90% of the respondents indicated that their outcomes were achieved at or above the expected levels. Such a high level of outcome achieve ment validated the high level of success of the TOP grants. Respondents reported that their major or most important outcomes included technical and social outcomes, such as increasing the awareness and availability of the Internet, video teleconferencing, and virtual libraries; increasing employability and literacy; and increasing confidence and community pride.

Tables 3.1-2 and 3.1-3 describe the communities, end users, and other beneficiaries served by TOP projects based on ten independent characteristics. According to respondents, approximately 20 million people have benefited in some way from TOP-related equipment or resources. Ninety-three percent (93%) of the respondents reported serving disadvantaged and/or underserved populations. In particular, 69% of respondents noted that end users were extremely poor, 51% noted that end users were geographically isolated, and 56% and 51% noted that end users were from rural areas or the inner city, respectively. People with disabilities were also indicated as direct end users by 38% of the survey participants and as beneficiaries of the TOP grant projects by 53% of the respondents. Additionally, the data indicate that program success resulted in approximately two-thirds (64%) of TOP grant projects expanding their scope to serve end users beyond those targeted in the original grant proposal (i.e., locations and organizations).

Table 3.1-2: Characteristics of End Users

Types of Community Segments and End Users Served	Percent YES			
Disadvantaged or underserved communities affected or served	93%			
End users in locations or organizations other than proposed	64%			
Community Segments (N = 39)	Percent YES			
Extreme poverty	69%			
Rural	56%			
Inner city	51%			
Geographically isolated	51%			
Disabled	38%			
Limited English speaking	36%			
Illiterate	28%			
Tribal	18%			
Other group not listed above	17%			
Mexican border communities	3%			

Table 3.1-3: Characterization of Other Beneficiaries

Community Segments	Percent YES	Number Respondents	
Extreme poverty	63%	38	
Rural	63%	38	
Geographically isolated	58%	38	
Disabled	53%	36	
Limited English speaking	46%	39	
Inner city	42%	38	
Illiterate	32%	37	
Other group not listed above	24%	33	
Tribal	17%	36	
Mexican border communities	5%	37	
Notes:	•		
Survey participants were allowed to select multiple	e responses.		

Other end users who were indirect beneficiaries are reported in Table 3.1-3. These included low-income individuals and those living in inner cities, rural, and isolated areas. The deaf and hearing-impaired living in remote areas were also among reported Some health care organizations reported that other end users gaining assistance were agencies such as large government and health care organizations, medical providers, immunizations providers, and patients with different chronic illnesses. Education organizations reported serving students and academic professionals, public library users, service programs, and youth. Other unique end users included business/industry personnel, community members, and community networking practitioners. One respondent noted supporting end users around the world.

Table 3.1-4 summarizes the types of barriers addressed by the projects. respondents identified whether their projects addressed any or all of seven specific and independent types of barriers. Eighty-six percent (86%) of the participants reported addressing technological barriers. Based on the data collected, other barriers that were significantly addressed included economic and geographic, closely followed by cultural barriers.

Table 3 1-4 Types of Barriers Addressed

Barriers to Access of Advanced Telecommunications Technology (N = 42)	Percent YES
Technological	86%
Economic	67%
Geographic	57%
Cultural	45%
Physical	33%
Linguistic	24%
Other	12%
Notes:	
Survey participants were allowed to select multiple responses.	

#### 3.2 RESULTS AND KEY FINDINGS RELATED TO PROJECT IMPLEMENTATION

#### **Key Finding**

TOP grantees proposed and implemented a wide variety of planning, access, technology and training activities to achieve their objectives. Most projects were noted as generating spin-off activities, which are additional services not proposed in the original TOP proposal. The most common obstacles or impediments experienced were the underestimation of planning time, inadequate or under-qualified staffing, and lack of commitment and follow-through.

#### **Key Finding Statistics**

- On average, 80% of the responding TOP grantee organizations implemented their projects at a level that met or exceeded what was proposed.
- 62% of respondents indicated the existence of spin-off activities that resulted in a total of \$35.5M in additional funding across all projects.
- 74% of respondents underestimated the amount of time/effort required; 57% noted inadequate or under-qualified staffing; and 50% indicated a lack of commitment and follow-through on the part of partners and/or community stakeholders.

Tables 3.2-1 through 3.2-4 identify the wide variety of planning, access, technology, and training activities, respectively, proposed and implemented by the grantee organizations. The percent of respondents that proposed each of the independent activities is shown in addition to the percent of respondents that implemented more than, the same as, or less than, the proposed amount of the activity. The data show that approximately 80% of the TOP grantee respondents implemented their projects at a level that met or exceeded what was proposed.

As seen in Table 3.2-1, the most commonly proposed and most often implemented planning activity was "interviewing potential end users and/or other beneficiaries."

Table 3.2-1: Types of Planning Activities Proposed by TOP Grantees and Extent of Implementation

	Proposed (N = 42)	Implemented					
Planning-Related Activities	Percent YES	Percent NEVER	Percent LESS	Percent SAME	Percent MORE	Number Respondents	
Interview potential end users and/or other beneficiaries	79%	0%	9%	67%	24%	33	
Evaluate the capabilities and limitations of an existing information/communications system or network	71%	0%	10%	63%	27%	30	
Identify mechanisms to create communications links between disparate databases, programs, agencies, or organizations	71%	0%	30%	33%	37%	30	
Conduct a community assessment to gain a better understanding of the population to be served	64%	0%	15%	70%	15%	27	
Conduct a media campaign to increase awareness of the value of the information infrastructure	50%	0%	29%	48%	24%	21	
Identify mechanisms to integrate disparate telecommunications systems (such as video conferencing with public broadcast facilities)	23%*	0%	33%	33%	33%	9	

Notes:
Survey participants were allowed to select multiple responses.

There were a total of 40 respondents to this option.

According to grantees, their planning activities were heavily focused on evaluating the capabilities and limitations of an existing network and identifying mechanisms to create communication linkages between disparate databases, programs, agencies, and organizations. These planning activities were aligned with the most commonly proposed and implemented technology and access activities.

In the area of access, Table 3.2-2, 83% of the respondents proposed "establishing access sites for reaching the information infrastructure" and the level of implementation was 91%, also one of the highest for the access area.

Table 3.2-2: Types of Access Activities Proposed by TOP Grantees and Extent of Implementation

•	Proposed		Implemented					
Access-Related Activities	Percent YES	Number Respondents	Percent NEVER	Percent LESS	Percent SAME	Percent MORE	Number Respondents	
Establish access sites for reaching the information infrastructure	83%	42	0%	9%	60%	31%	35	
Establish a resource center or centralized location for information exchange	67%	42	0%	4%	46%	50%	28	
Provide information or services to meet community needs via the World Wide Web	67%	42	0%	14%	39%	46%	28	
Develop an alliance for better access to technology*	62%	42	0%	12%	40%	48%	25	
Establish a network to provide educational services	57%	42	0%	0%	46%	54%	24	
Provide Internet services through an established Internet service provider (ISP)	48%	42	0%	10%	80%	10%	20	
Establish a network to provide health services	31%	42	0%	0%	77%	23%	13	
Establish a network to provide government services	26%	42	0%	0%	45%	55%	11	
Create a network to refurbish and/or distribute donated computer equipment**	21%	42	22%	33%	22%	22%	9	
Create a new entity to provide telecommunications services	21%	42	0%	0%	44%	56%	9	
Establish an employment and job training network	19%	42	0%	13%	38%	50%	8	
Establish a network to provide public safety services	19%	42	0%	25%	50%	25%	8	
Provide mobile access to the information infrastructure	17%	42	0%	29%	43%	29%	7	
Establish an economic development network	17%	42	0%	14%	43%	43%	7	
Create electronic town meetings	5%	42	0%	0%	50%	50%	2	

#### Notes:

Survey participants were allowed to select multiple responses.

\*One survey participant reported developing an alliance, however did not provide the level of implementation.

In the technology area, Table 3.2-3, the most commonly proposed activities were "connecting new community-based organizations and agencies to existing network" and "establishing links between existing networks."

<sup>\*</sup>Only nine participants proposed this activity and two of the nine did not implement at all.

Table 3.2-3: Types of Technology Activities Proposed by TOP Grantees and Extent of Implementation

Proposed		Implemented					
Percent YES	Number Respondents	Percent NEVER	Percent LESS	Percent SAME	Percent MORE	Number Respondents	
55%	42	0%	17%	39%	43%	23	
52%	42	0%	5%	64%	32%	22	
50%	42	5%	14%	57%	24%	21	
48%	42	5%	5%	55%	35%	20	
40%	42	0%	6%	59%	35%	17	
40%	42	6%	6%	41%	47%	17	
38%	42	13%	19%	63%	6%	16	
36%	42	8%	8%	46%	38%	13	
17%	42	0%	29%	71%	0%	7	
12%	42	20%	0%	40%	40%	5	
	Percent YES 55% 52% 50% 48% 40% 40% 38% 36% 17%	Percent YES         Number Respondents           55%         42           52%         42           50%         42           48%         42           40%         42           38%         42           36%         42           17%         42	Percent YES         Number Respondents         Percent NEVER           55%         42         0%           52%         42         0%           50%         42         5%           48%         42         5%           40%         42         0%           40%         42         6%           38%         42         13%           36%         42         8%           17%         42         0%	Percent YES         Number Respondents         Percent NEVER         Percent LESS           55%         42         0%         17%           52%         42         0%         5%           50%         42         5%         14%           48%         42         5%         5%           40%         42         0%         6%           40%         42         6%         6%           38%         42         13%         19%           36%         42         8%         8%           17%         42         0%         29%	Percent YES         Number Respondents         Percent NEVER         Percent LESS         Percent SAME           55%         42         0%         17%         39%           52%         42         0%         5%         64%           50%         42         5%         14%         57%           48%         42         5%         5%         55%           40%         42         0%         6%         59%           40%         42         6%         6%         41%           38%         42         13%         19%         63%           36%         42         8%         8%         46%           17%         42         0%         29%         71%	Percent YES         Number Respondents         Percent NEVER         Percent LESS         Percent SAME         Percent MORE           55%         42         0%         17%         39%         43%           52%         42         0%         5%         64%         32%           50%         42         5%         14%         57%         24%           48%         42         5%         5%         55%         35%           40%         42         0%         6%         59%         35%           40%         42         6%         6%         41%         47%           38%         42         13%         19%         63%         6%           36%         42         8%         8%         46%         38%           17%         42         0%         29%         71%         0%	

Table 3.2-4: Types of Training Activities Proposed by TOP Grantees and Extent of Implementation

	Proposed		Implemented				
Training-Related Activities	Percent YES	Number Respondents	Percent NEVER	Percent LESS	Percent SAME	Percent MORE	Number Respondents
Provide onsite education and training	88%	41	0%	11%	44%	44%	36
Provide computer hardware needed to meet education and training needs	83%	40	0%	9%	64%	27%	33
Use a "train-the-trainer" approach	66%	41	0%	7%	59%	33%	27
Establish a training and resource center	57%	42	0%	4%	50%	46%	24
Develop training materials (print, video, electronic)	54%	41	5%	5%	55%	36%	22
Create a network of certified trainers	24%	41	0%	20%	30%	50%	10
Develop a system for electronic/online self-training	22%	41	11%	22%	44%	22%	9
Notes: Survey participants were allowed to select multiple responses.							

Several types of training activities were proposed and implemented by grantees as seen in Table 3.2-4. Eighty-eight percent (88%) of respondents proposed on-site training to end users in the use of telecommunications technologies, and 83% provided computer hardware to meet the education and training needs. Other frequently proposed training activities included training trainers, establishing training centers, and developing training

materials. On average, these training activities were implemented by 88% of the grantee organizations at or above the proposed level.

Tables 3.2-5a through 3.2-5c summarize the obstacles or impediments experienced by grantees in carrying out their projects. Table 3.2-5a displays the incidence and types of obstacles or impediments experienced in terms of organization; Table 3.2-5b displays the incidence and types of obstacles or impediments experienced in the area of planning; and Table 3.2-5c displays the incidence and types of obstacles or impediments experienced in technology. These tables show the percent of respondents indicating that they experienced obstacles or impediments of a particular type. These problem types are not mutually exclusive, therefore respondents could reply to one or more.

Table 3.2-5a: Obstacles or Impediments Experienced by Grantees: Organizational

Organizational Problems (N = 42)	Percent YES
Inadequate or under-qualified staffing	57%
Lack of commitment and follow-through on the part of partners and/or community stakeholders	50%
Excessive staff turnover	40%
Difficulty obtaining matching funds	31%
Communication problems/ misunderstandings of roles	26%
Notes: Survey participants were allowed to select multiple responses.	•

Table 3.2-5b: Obstacles or Impediments Experienced by Grantees: Planning

Planning Problems (N = 42)	Percent YES
Underestimated the amount of effort/time required	74%
Underestimated the resources needed	45%
Outdated, insufficient, or poor quality data/ information to work with	14%
Necessary information was proprietary	7%
Notes: Survey participants were allowed to select multiple responses.	

Table 3.2-5c: Obstacles or Impediments Experienced by Grantees: Technology

Technology Problems (N = 42)	Percent YES
Delays in installing equipment	43%
Delays purchasing or receiving equipment	36%
Technology not performing as expected	31%
Delays due to difficulties gaining line connection	26%
Delays due to incompatibility problems with technology	26%
Lack of availability of technology (within budget)	21%
<b>Notes:</b> Survey participants were allowed to select multiple responses.	J

Ninety-three percent (93%) of the respondents identified organizational, planning, or technological obstacles or impediments experienced during the project's execution. Seventy-four percent (74%) reported underestimating the amount of required time and effort, 57% noted staffing issues, and 50% noted obstacles or impediments with follow-through and commitment of their stakeholders and community. The data in this area

suggest that additional focus on project planning tools and techniques, staffing, and communication may improve outcomes.

Table 3.2-6 summarizes the spin-off activity noted by participants. It shows the percent of respondents that indicated the existence of spin-off activities, and the percent of respondents indicating funding from specified sources.

Table 3.2-6: Spin-off Activities

Spin-off Activity Information for TOP Grants	Percent YES	Number Respondents
Spin-off activities (additional services not included in original TOP grant proposal) generated as a result of TOP project grant	62%	42
Funding Sources	Percent YES	Number Respondents
Education organization	50%	22
Private sector organization	43%	23
Governmental organization	41%	22
Community organization	33%	21
User fee/fee-for-service	23%	22
Public safety organization	14%	22
Health care organization	13%	23
Notes: Survey participants were allowed to select multiple responses.		

Sixty-two percent (62%) of the respondents engaged in spin-off activities. Respondents estimated the approximate dollar amount or value of additional equipment, resources, or investments that resulted from spin-off activities to total more than \$35.5M. Though the amount of spin-off funds received by grantees varied greatly, the higher funding amounts reported were \$17M in one organization and \$13M in another. Several types of organizations provided funding for spin-off activities, including education organizations, community organizations, private-sector organizations, governmental organizations, health care organizations, public safety organizations, user fee/fee-for-service organizations, organizations servicing children and families, and others.

Specific training-related spin-off activities included training in business, database development, and languages, as well as curriculum and content development, and community and teacher training. Technology-related spin-off activities utilized resources such as Intranet connectivity, public technology training centers, accessible web services, and cyber campuses. Other spin-off activities included purchases of technical and medical equipment and the co-founding of a telecom infrastructure forum.

#### 3.3 RESULTS AND KEY FINDINGS RELATED TO PROJECT SUSTAINABILITY

#### Key Finding

Eighty-eight percent of survey respondents reported sustainability through 2000, and remain in operation. Factors cited for project growth and expansion included additional funding, private sector support, as well as staff and partner commitment and collaboration. Reasons cited for lack of project sustainability include personnel changes and lack of funding.

#### **Key Finding Statistics**

- 88% of the responding TOP projects remained in operation at the time of the survey.
- One-third have expanded services since the grant period ended.
- Five of the forty-two projects have ceased service.

Table 3.3-1 provides data on current TOP operational status. This table shows the percent of respondents that indicated a specified project status—full operation, changed function, partial operation due to fewer end users, partial operation due to limited services, and those no longer in operation.

Table 3.3-1: TOP Grant Project Operational Status

Project Status Options	Percent YES	Number Respondents
Sustained	88%	37
Changed/Grown/Expanded		9
Full Operation		13
Full Services/Fewer End Users	7	
Fewer Services/Full End Users		8
No Longer Operational	12%	5

Grantees responded to three questions related to the sustainability of TOP grant projects. The responses to these questions indicated that 88% of projects remained in partial or full operation. Survey respondents noted that the success of their TOP grant project led to additional funding, consistency of project personnel, and spin-off activities that were responsible for their continued sustainability. Factors identified as facilitating project growth and expansion included additional funding, commitment to the project, and collaboration and cooperation of partners and service entities, along with advances in and increased usage of telecommunications technologies and private-sector support.

Of the 37 sustained projects, 13 were in full operation, with no change in capacity or project status. Nine of the projects reported operating in a function that had changed, grown, and/or expanded considerably from the project's original proposal. Thirty-six percent (36%) of the sustained projects were in partial operation, serving either fewer end users or providing fewer services. About half of those in partial operation reported providing a full range of services serving fewer end users than intended. The other half of those in partial operation reported serving the full scope of end users while providing a limited range of services.

Those reporting reductions in operation were further asked to provide the reasons for lack of full project sustainability. Respondents indicated that two key factors—personnel changes and lack of project funding, each identified by about half of the respondents indicating partial or no project activity—contributed to the changes in project status. This correlated with several of the organization and staffing-related problems noted by projects in Section 3.2.

Table 3.3-2 further defines the factors identified by grantees as contributing to the lack of full operational capacity of the projects over time. The respondents that noted a lack of full operational capacity were asked to identify the specific factors contributing to lack of full sustainability. The responses are shown in Table 3.3-2. The contributing factors are not mutually exclusive of one another; therefore multiple responses were allowed.

Table 3.3-2: Contributing Factors to Lack of Project Operational Sustainability

Contributing Factors (N = 20)	Number Respondents Reporting
Personnel changes (project staff who were most interested are no longer involved)	11
No funding available for operations (staff, facilities)	11
No funding available for maintenance	6
Loss of partners	6
Technological obsolescence (faster, more accurate, better alternatives became available)	5
Lack of community support	4
Lack of community awareness	3
Mechanical obsolescence (equipment became inoperable, unreliable, worn out)	3
Not enough users	1
Notes: The respondents to this question were those that indicated partial or ceased operation in T.	able 3.3-1.

#### 3.4 RESULTS AND KEY FINDINGS RELATED TO IMPACT OF TOP G RANT

#### **Key Finding**

#### **Key Finding Statistics**

TOP grant funding served as a primary enabler to project implementation, resulting in the projects' ability to increase their range of services and expand the number of people served, while accelerating project implementation.

• 67% of the responding grantees estimated that projects would never have been implemented without TOP funds.

 Of the 33% respondents that felt their project would have been implemented without TOP funds, nearly all noted that the number of people reached by the project would have decreased, that the project would have been delayed, and that the range of services offered would have decreased.

Table 3.4-1 summarizes the responses provided by grantees to four distinct questions regarding the impact of TOP project grants. The first question addresses the percent of respondents who felt that their projects would not have been implemented without TOP funds. The remaining three questions are based on the responses from grantees that felt that their projects would have been implemented, even without TOP funds. Table 3.4-1 provides the respondents' best estimates of how their project's services, scale, and schedule might have been affected without receipt of TOP funds.

Table 3.4-1: Impact of TOP Grant Funds on Range of Services

Questions Regarding Impact of TOP Project Grants	Percent Selecting Response Option / Number of Respondents				
What do you believe would have been the most likely outcome of your project if you did not receive Federal funds	Project probably never implemented	ever implemented /		Number Respondents	
through the TOP program?	67%	33%	42		
How do you believe the absence of TOP funding would have affected the range of services offered by your project?	Project still offer full services	Project services suffer minor reductions	Project services dramatically reduced	Number Respondents	
	7%	21%	71%	14	
How do you believe the absence of TOP funding would have affected the scale of your project?	Project still reach equivalent number of people		Project would reach significantly fewer people	Number Respondents	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7%	7%	86%	14	
How do you believe the absence of TOP funding would have affected the implementation schedule for your project?	Project implemented on the same schedule	Project implementation delayed slightly	Project implementation substantially delayed	Number Respondents	
	7%	14%	79%	14	

Since TOP grant funds generally represented only a portion of the total project funding, grantees were asked to estimate the level of project implementation that would have been possible without TOP funds. Grantees indicated that without TOP funding there would have been a reduction in the range of services offered and number of people reached. Responding organizations noted that TOP funding enabled them to increase their range of services and expand the number of people served. They also reported that TOP funding reduced the time needed to carry out the project.

#### 3.5 RESULTS AND KEY FINDINGS RELATED TO COMMUNITY INVOLVEMENT

#### Key Finding

TOP grant projects surveyed partnered with an average of 18 other organizations to achieve project goals.

#### **Key Finding Statistics**

- 98% of the responding grantee organizations partnered with other organizations, of which 62% developed new partnership relationships.
- 64% of the responding grantee organizations indicated partnering with educational institutions.
- 64% of the responding grantee organizations also indicated partnering with government agencies.

Table 3.5-1 reports the average number of partner relationships per responding grantee and the percent of the respondents that indicated having one or more partners. This table also shows the average number of partner organizations with a prior working relationship, as indicated by respondents, and the average number of new relationships established per grantee. The percent of respondents indicating the existence of at least one partner relationship in response to each question is also provided.

Table 3.5-1: Information on TOP Grantee Partner Activity

Questions to Quantify Partner Relationships Established by Grantees (N = 42)	Average Number, Per Grantee	Percent Indicating One or More
Number of organizations serving as a partner	18	98%
Number of partner organizations with a prior working relationship with the grant recipient organization	7	88%
Number of new relationships established by grantees	10	62%

Grantees responded to five questions related to the community involvement and partnering relationships in TOP grant projects. The responses to these questions indicated that 98% of the grantees partnered with other organizations, with an average of 18 partners per project, to meet project needs such as resources, equipment, and office space. Respondents indicated that 62% of the grantees that partnered with organizations developed new partnership relationships to meet these needs, which resulted in an average of 10 new partnerships per project.

Tables 3.5-2a through 3.5-2g summarize the types of organizations partnering with TOP grantees: a) health care, b) education, c) public safety, d) government, e) community, f) non-profit, and g) private sector. Each table shows the percent of grantees indicating that they had at least one partner of the respective type. Each table also shows the total number of partners indicated from all respondents of the type listed. Since projects could

have more than one partner type, many respondents indicated multiple partners across the types.

Table 3.5-2a: Grantee Partners: Health Care

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type		
Health care organizations	40%	51		
Public health agency	21%	17		
Hospital	17%	18		
Medical school	7%	3		
Clinic, medical center, or specialized practice	7%	6		
Other health care entity (specify)	7%	3		
Professional association	5%	4		
Note: Survey participants were allowed to select multiple responses.				

Table 3.5-2b: Grantee Partners: Education

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type
Education Organizations	64%	109
Higher education institution	48%	42
K-12 school or school system	36%	51
Adult education org	14%	8
Other education entity	10%	6
Early childhood org	5%	2
Note: Survey participants were allowed to select multip	ole responses.	•

Table 3.5-2c: Grantee Partners: Public Safety

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type		
Public safety organization	19%	10		
Law enforcement agency or department	14%	7		
Other public safety entity	5%	2		
Fire/rescue/emergency agency or department	2%	1		
Note: Survey participants were allowed to select multiple responses.				

Table 3.5-2d: Grantee Partners: Government

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type 85		
Government agency	64%			
State government agency	31%	45		
City or municipal agency	29%	21		
County government agency	17%	7		
Other government agency	12%	9		
Tribal government	7%	3		
Note: Survey participants were allowed to select multip	ole responses.			

Table 3.5-2e: Grantee Partners: Community

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type 99		
Community organization	43%			
Library	24%	35		
Community development organization	19%	42		
Other community organization or entity	17%	9		
Museum or other cultural entity	10%	10		
Public broadcast organization	7%	3		

Table 3.5-2f: Grantee Partners: Non-Profit

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type		
Nonprofit Organizations	50%	264		
Other nonprofit organization	31%	218		
Private foundations or institute	29%	44		
Association	5%	2		
Note: Survey participants were allowed to select multip	ole responses.	•		

Table 3.5-2g: Grantee Partners: Private Sector

Partner Organization Type (N = 42)	Percent that Partnered with Organization Type	Number of Partners of Type		
Private Sector Organizations	50%	108		
Internet Service Provider	21%	11		
Other private entity	19%	50		
Computer hardware company	17%	16		
Computer software company	17%	16		
Independent telephone company	12%	8		
Regional Bell Operating company	12%	5		
Commercial broadcasting organization	5%	2		
Cable company	0%	0		

Partnering organizations were spread among all organization types, with 64% of all participating respondents partnering with educational institutions and 64% partnering with government agencies. Many of the grantee organization projects that partnered with educational institutions and government agencies actually formed new relationships with many sub-agencies and school systems within established partner organizations. The data indicate that several of the grantees (averaging 18 partners per project) partnered with as many as 40 to 60 per project, while others reported less than 10 partners. Types of support provided by partners included financial support to the project, loans, donations or discounts on equipment or supplies for project-related activities, and loans or donations of building/office space to the project.

Respondents noted that positive changes occurred in partnership relationships, including partners becoming more committed and exhibiting a willingness to share more time and expertise. Grantees also reported extensive intangible benefits from establishing partnering relationships, including improved communication and collaboration, and an increase in interactions, projects, joint strategic planning, and resource sharing. Although several partnerships were terminated due to a lack of funding and the implementation of annual user fees, respondents reported an overall expansion in programs and services.

Table 3.5-3 illustrates the type of support provided by grantee partners. For each type of service or support listed in Table 3.5-3, the percent of grantees indicating receipt of that type of support is provided. Participants also indicated that there were multiple partners that provided each type of service or resource. One organization noted that 1000 different partners provided data access to their organization. Respondents indicated that up to 78% of partners also contributed their expertise (e.g., in the form of consultants, engineers, attorneys, programmers, software engineers, systems professionals) or services (e.g., telecommunications providers) to the project.

Table 3.5-3: Type of Support Provided by TOP Grantee Partners

Service or Resource Provided (N = 42)	Percent with One or More Partners Providing Service or Resource of Type
Expertise or intellectual capital	78%
Space or facilities	73%
Funding	76%
Personnel	66%
In-kind or reduced rates for services	63%
Equipment or equipment discounts	51%
Data access	51%
Other (e.g., as agencies linked to wide area networks)	2%
Notes: Survey participants were allowed to select multiple responses.	

#### 3.6 RESULTS AND KEY FINDINGS RELATED TO PROJECT TECHNOLOGY

#### Key Finding

TOP grant funding enhanced various types of telecommunications technology and services offered to grantee project end users.

#### **Key Finding Statistics**

- 83% of the responding grantee organizations reported that their projects used digital services.
- 77% of respondents noted that planned technology resource needs were met.
- 69% of respondents helped end users obtain access to the Internet.
- 64% of respondents indicated that their projects made personal computers available to end users.

Table 3.6-1 summarizes the telecommunications technologies and services used by TOP grantees. Table 3.6-2 summarizes the equipment provided to end users by TOP grantees. Table 3.6-3 summarizes the services provided by the TOP grantees. Table 3.6-4 describes the settings in which telecommunications equipment was deployed, the maximum number of distinct facilities or sites that housed the equipment or resources in a particular setting, and the total number of distinct facilities of the type listed.

Table 3.6-1: Technologies Provided by Grantees

Telecommunications Technologies and Services (N = 42)	Percent YES
Digital services (e.g., ISDN, DSL, T1, 56K)	83%
Dial-up telephone lines and modems	60%
Wireless services (e.g., cellular, PCS, microwave)	10%
Satellite services	10%
Cable modems	10%
Other	5%
Note: Survey participants were allowed to select multiple responses.	·

Table 3.6-2: Equipment Provided by Grantees

Devices / Services (N = 42)	Percent YES
Personal computers	64%
Network computers	55%
Video teleconferencing unit	38%
Other	19%
Television-connected device (e.g., Web TV)	0%
Personal digital assistant (e.g., hand-held computer device)	0%
Note: Survey participants were allowed to select multiple responses.	•

Table 3.6-3: Services Provided by Grantees

Internet Service Providers Used to Connect End Users to Internet (N = 30)	Percent YES
Commercial Internet service provider (ISP)	53%
University network	33%
K-12 school network	33%
State or local government network	27%
Nonprofit community network	20%
The project itself provides Internet services directly to end users	20%
Other	7%
Note: Survey participants were allowed to select multiple responses.	

Table 3.6-4: Equipment Settings Supported by TOP Projects

Equipment Information	Number of Sites					
Equipment Setting	Percent YES	Maximum	Total	Number of Respondents		
Nonprofit organization or entity	45%	36	96	16		
K-12 school or school district	38%	10	70	15		
College or university	36%	9	31	13		
Library, museum, or other cultural entity	31%	20	64	12		
Hospital, clinic, or other health care organization	29%	10	31	12		
Government building	29%	23	63	10		
Community center	17%	14	19	5		
Private sector organization or entity	12%	2	6	5		
Other	10%	4	8	4		
Mobile vehicle	7%	54	57	3		
Fire and rescue department/agency	5%	12	13	2		
Law enforcement department/agency	5% 1 2		2			
Private home or residence	2%	150	150	1		

This section of the survey identified the extent to which telecommunications and information technologies were used to deliver valuable services and opportunities to end users. TOP grant projects were ultimately successful in providing valuable access to information technology, equipment services, and training to a variety of end users with a focus on traditionally underserved populations. The levels and types of technology and services varied as well as the location and number of sites served. The respondent data noted that, on average, the majority of grant projects utilized digital services (83% of respondents) and dial-up telephone lines and modems (60% of respondents). Many grantees provided end users with the opportunity to utilize personal computers (64% of respondents), network computers (55% of respondents), and video teleconferencing units (38% of respondents). The data show that TOP projects generally focused on creating a high level of public access to standard technologies and tools that are unfortunately not

generally available in rural or underserved environments. Data showed that Internet accessibility was a key focus for several projects. Sixty-nine percent (69%) of respondents noted that their project helped end users obtain access to the Internet. Twenty percent (20%) of the projects provided Internet services directly to end users.

Forty-five percent (45%) of the respondents indicated that the equipment and technology resources made available for use were housed in nonprofit entities, 38% were housed in K-12 schools or school districts, and 36% were housed in colleges or universities.

#### 3.7 RESULTS AND KEY FINDINGS RELATED TO PROJECT EVALUATION

#### Key Finding

# The TOP grant projects surveyed used a variety of methods to measure end-user satisfaction levels, evaluate effectiveness of resources and services offered, and determine overall project benefits.

#### Key Finding Statistics

- 90% of the project data evaluated is related to end-user satisfaction and 81% to project benefits for end users.
- 79% of respondents indicated that they had completed an evaluation report.
- Participant observations (79%) and surveys (76%) were the most frequently cited methods of evaluation utilized for data collection.

Table 3.7-1 summarizes the types of data collection methods used by TOP project grantees for evaluation. Table 3.7-2 indicates the types of data collected.

Table 3.7-1: Methods Used for Collecting Project Evaluation Data

Data Collection Methods (N = 42)	Percent YES
Participant observation	79%
Survey	76%
Interviews	69%
Site visits	69%
Document review	52%
Web site monitoring	40%
Pre/post-testing	40%
Case studies	38%
Monitoring of information requests	38%
Focus groups	26%
Notes: Survey participants were allowed to select multiple responses.	·

Table 3.7-2: Types of Data Collected for Project Evaluation

Types of Data (N = 42)	Percent YES
End user's satisfaction with your project's information/ telecommunications services or activities	90%
Project benefits on end users	81%
Project staff's (or service providers') satisfaction with the project's services and activities	79%
The effectiveness with which information/telecommunications services are now being provided	56%*
Project benefits on other beneficiaries of project services	50%
Other beneficiaries' satisfaction with your project's information/ telecommunications services and activities	43%
Intended end users w ho rarely or reluctantly made use of your project's information/telecommunications services or resources	32%*
Intended end users who refused to use your project's information/ telecommunications services or resources	12%*
Notes: Survey participants were allowed to select multiple responses. *There were a total of 41 respondents to this option.	

Grantees responded to questions related to the overall evaluation methods and key evaluation criteria used to assess the effectiveness of their projects. In order to enhance the success, sustainability, and replicability of their projects, TOP grantees monitored and evaluated their project activities and outcomes. Seventy-nine percent (79%) of respondents indicated that they have a completed evaluation report that can be shared with others interested in their project. The most often used methods for collecting project evaluation data included participant observations (used by 79% of respondents), surveys (used by 76%), interviews and site visits (used by 69%), and document reviews (used by 52%). Ninety percent (90%) of the respondents assessed end-user satisfaction, 81% determined project benefits for end users, and 79% and 43%, respectively, measured project staff or service provider satisfaction and other beneficiary satisfaction, respectively. This high-level review of end-user evaluative activity indicated that TOP projects were focusing on goal achievement and were measuring project impact.

#### 3.8 RESULTS AND KEY FINDINGS RELATED TO PROJECT DISSEMINATION

#### Key Finding

adopted by other

organizations.

# Grantees strongly agreed that their projects would serve as replicable models to other organizations, and that innovations introduced by their projects could be

#### Key Finding Statistics

- 96% of respondents agreed that their project innovation was advantageous, and 93% of project grantees indicated agreement that these advantages were easily documented, demonstrated, and communicated to others.
- 95% of the responding grantee organizations indicated that their projects might serve as replicable models.
- On average, thousands of organizations were receiving information on each project through Internet web sites and thousands more through marketing efforts and advertising.

Table 3.8-1 represents the respondents' assessment of the likelihood that others would adopt their project innovations. Table 3.8-2 provides an estimate of the average number of organizations that had received project-related information from the grantee organizations, and provides the average number of organizations per grantee that had implemented similar projects due to disseminated materials.

Table 3.8-1: Likelihood of Adoption of Project Innovations by Others

Assessment of Likelihood of Adoption of Project Innovations by Others	Strongly agree	Moderately agree	Neither agree/ disagree	Moderately disagree	Strongly disagree	Not applicable	Number of Respondents
The innovation brought about by this project provides a marked advantage over alternative ways to provide similar services	59%	37%	2%	0%	0%	2%	41
The advantages of the innovation introduced in this project are easily documented, demonstrated, communicated to others	44%	49%	7%	0%	0%	0%	41
Project equipment and resources are not threatening or intimidating to use	22%	56%	5%	15%	2%	0%	41
The project's innovation makes the information infrastructure easier to understand and use than it would be otherwise	28%	35%	33%	3%	0%	3%	40
The innovation brought about by this project easily implemented by others with reasonable amount of effort/ expense	34%	34%	7%	15%	10%	0%	41

Table 3.8-2: Methods of Dissemination and Number of Similar Projects Implemented Due to Disseminated Materials

Average Number of Information Recipients per Respondent	Number of Respondents
15,193	15
6,793	21
1,802	15
1,469	23
1,177	12
977	28
506	24
205	21
65	22
52	16
Average Number of Similar Projects per Respondent	Number of Respondents
10	15
	Information Recipients per Respondent  15,193  6,793  1,802  1,469  1,177  977  506  205  65  52  Average Number of Similar Projects per Respondent

Grantees responded to several questions related to overall project information dissemination and replicability. The responses to these questions indicate that 95% of grantee projects could serve as replicable models for other similar organizations to emulate. Grantees also noted that several organizations that had received information about TOP grant projects had proceeded to implement similar projects or project-related ideas. Of the 42 respondents, 96% agreed that the innovation brought about by their project provided a marked advantage over alternative ways to provide similar services.

In addition, 93% agreed that the advantages introduced in the project were easily

documented, demonstrated, and communicated to others.

Various media were used to provide information or echnical assistance to end-user organizations. Respondent data showed that the method responsible for grantees reaching the highest number of organizations was through marketing efforts and advertising. On average, approximately 15,000 end-user organizations per grantee organization were reached using that method. One respondent reported reaching as many as 200,000 end-user organizations, while others reported fewer than 10. Another method that proved to be effective in reaching organizations was through Internet web sites, where the average number of end-user organizations reached per grantee organization was almost 7,000. Other effectively utilized methods included technology fairs, job fairs, and other community events, and articles, reports, or other written publications.

#### SECTION 4.0 CONCLUSIONS

This report provided a thorough analysis of the accomplishments of the 1996 and 1997 TOP program grantees that were surveyed between August and November of 2000. Survey responses from 42 grantees were analyzed quantitatively and qualitatively to identify key findings related to project outcomes, implementation, sustainability, technology, impact, evaluation, community involvement, and replicability. The eight key findings and survey statistics clearly show that TOP grantees were highly effective in meeting the goals of their projects and achieving the mission of the NTIA TOP.

As a direct result of TOP grant funding, projects were implemented that improved the quality of, and the public's access to, education, health care, public safety, and other community-based services. The 42 projects reviewed in this study provide models for planning, implementing, and sustaining partnership-based technology enhancement projects that ultimately improved the accessibility of critical services to underserved populations. The impact areas and beneficiaries were widespread geographically and spanned the public and non-profit sectors, including health care, education, and other service industries. NTIA's TOP process has proven successful by building on lessons learned, encouraging broad-based partnering, and documenting and disseminating While TOP grant funding was seen as an enabler for outcome achievement for many projects, in many cases the partnering emphasis was responsible for expansion, sustainability, and replicability. NTIA TOP projects have succeeded in sustaining and expanding their success and in driving the implementation of spin-off activities. The projects, while demonstrating a level of commonality in their general purpose, develop and demonstrate a high level of innovation and creativity in their methods, strategies, relationships, and accomplishments. Though obstacles or impediments were encountered during the projects, creative partnerships and solution strategies were utilized to resolve them. Ultimately, the projects proved to be well designed for sustainability and continuous improvement.

JJA recommends that lessons learned by projects in the areas of planning, funding continuity, staffing consistency, and commitment be documented and shared, as these areas were often cited as reasons for the lack of project sustainability. Further research into the transition of projects to serve other functions or reduced operating levels after TOP funding ends is required to understand the impact, rationale, and value of such changes. Further research into the key aspects of successful partnering may also be helpful, since there was a great disparity across projects in the number, value, and types of partnerships utilized. Developmental training for grantees based on lessons learned and best practices may further improve the long-term success of TOP grantees and the accomplishment of the TOP mission.

# APPENDIX A NTIA TOP PROJECT SURVEY

#### U.S. Department of Commerce National Telecommunications and Information Administration

# EVALUATION OF THE TECHNOLOGY OPPORTUNITIES PROGRAM (formerly known as TIIAP)

#### Survey of 1996 & 1997 Grant Recipients

FORM APPROVED O.M.B. No.: 0660-0013

EXPIRATION DATE: 05/31/2001

This survey is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

#### INSTRUCTIONS FOR THIS SURVEY:

The U.S. Department of Commerce is conducting an evaluation of the Technology Opportunities Program (TOP). The purposes of this survey are to evaluate the impact of TOP and to identify ways the program might be improved.

We ask that the requested information be provided by the current principal investigator (PI) or, if this is not possible, by the person who is most knowledgeable about the history and current status of the project. The PI name, contact information, and other descriptive information about the project appear below. Please correct the label if any of the information is incorrect.

#### **AFFIX LABEL HERE**

IF ANY OF THE ABOVE INFORMATION IS INCORRECT, PLEASE UPDATE DIRECTLY ON LABEL.

RETURN COMPLETED FORM BY

August 31, 2000 TO:

TOP Evaluation
Johnson & Johnson Associates, Inc.
Efe Quality House
3970 Chain Bridge Road
Fairfax, Virginia 22030-3316

or by email "REPLY".

IF YOU HAVE ANY QUESTIONS, CALL:

Wanda K. Savage-Moore Tel: 703-359-5969 Fax: 703-359-5971

E-mail: wsavagemoore@jjaconsultants.com

Public reporting burden for this collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Linda Engelmeier, Acting Departmental Forms Clearance Officer, Department of Commerce—Room 5327, 1401 Constitution Avenue, NW, Washington, D.C. 20230; and to the Office of Management and Budget, Paperwork Reduction Project 0660-0013, Washington, D.C. 20503. Notwithstanding any other provision of law, no person is required to respond unless the survey displays a valid OMB control number.

#### I. PROJECT OUTCOMES

1. Listed below are outcomes that are commonly achieved through the application of information infrastructure technology. In column A, indicate whether your project was striving to achieve a given outcome.

For those marked "Yes" in column A, use column B to indicate how successful your TOP project has been in achieving the specified outcome.

	Outcome		A. Outcome?		B. Extent of Achievement		
		Yes	No	Less than expected	Same as	More than	
a)	Improve delivery of social services	1	2	1	2	3	
b)	Increase sense of community and focus on the common good	1	2	1	2	3	
c)	Increase family stability	1	2	1	2	3	
d)	Increase cultural sensitivity and social tolerance	1	2	1	2	3	
e)	Increase participation in civic affairs	1	2	1	2	3	
f)	Increase employment	1	2	1	2	3	
g)	Reduce poverty	1	2	1	2	3	
h)	Enhance economic development	1	2	1	2	3	
i)	Enhance community development	1	2	1	2	3	
j)	Enhance long-term telecommunication needs	1	2	1	2	3	
k)	Improve the quality of health care	1	2	1	2	3	
I)	Improve the effectiveness of public safety services	1	2	1	2	3	
m)	Improve training and learning opportunities	1	2	1	2	3	
n)	Improve cultural enrichment	1	2	1	2	3	
o)	Enhance coordination of community-wide information and communication services	1	2	1	2	3	
p)	Other (specify)	1	2	1	2	3	

a)	Linguistic	<b>Yes</b> 1	<b>No</b> 2	
b)	Technological		2	
c)	Geographic		2	
d)	Cultural		2	
e)	Economic		2	
f)	Physical	1	2	
g)	Other (specify)		2	
_				
_				
_				
_				

4. Please indicate below the approximate number of individuals who have benefited from TOP-related equipment or resources since the beginning of the project. In column A, indicate the number of direct end users, that is, workers (e.g., librarians, medical staff, 911 operators) or community members (e.g., students, persons seeking employment) who have direct access to the equipment or resources provided through your TOP grant. In column B, indicate the number of other beneficiaries, that is, individuals who have benefited from the improved services offered through your project without having direct access to project resources or equipment.

Select the single classification that best describes a category of end users/other beneficiaries (do not count individuals in more than one category). Use 0" to indicate that there were no direct end users/other beneficiaries for a given category. **DO NOT LEAVE ANY SPACES BLANK**.

		A. End users	B. Other beneficiaries
a)	Number in human service settings		
b)	Number in <b>cultural</b> settings		
c)	Number in <b>government</b> agencies		
d)	Number in <b>public safety</b> settings		
e)	Number in educational settings		
f)	Number in health care settings		
g)	Other settings not listed above (specify)		

5.	Did your project affect any disadvantaged or underserved community segments either as direct end
	users of project equipment/resources or as other beneficiaries of project-related services?

Yes	1	(Continue with Q6)
No	2	(Skip to Q7)

6. In column A, indicate whether each of the following disadvantaged or underserved community segments served as end users of project equipment or resources. In column B, indicate whether each community segment indirectly benefited from the improved services offered through your project without having direct access to project equipment or resources.

		A. End users?		B. Other beneficiaries?	
		Yes	No	Yes	No
a)	Extreme poverty	1	2	1	2
b)	Illiterate	1	2	1	2
c)	Limited English speaking	1	2	1	2
d)	Disabled	1	2	1	2
e)	Inner city	1	2	1	2
f)	Rural	1	2	1	2
g)	Geographically isolated	1	2	1	2
h)	Tribal	1	2	1	2
i)	Mexican border communities	1	2	1	2
j)	Other group not listed above (specify)	1	2	1	2

7.	Which of the following best describes the geographic distribution of the end users targeted by this project, i.e., individuals having direct access to project equipment or resources?
	a) In a single city, town, or county
8.	Which of the following best describes the geographic distribution of the other beneficiaries, i.e. individuals who indirectly benefited from the improved services offered through the project withou having direct access to project resources or equipment? (For example, students might indirectly benefit from a project involving a telecommunications network that is used exclusively by teachers.)  a) In a single city, town, or county
9.	Has your project expanded to serve additional end users in locations or organizations beyond those targeted in the TOP proposal?  Yes
10.	Please describe the additional end users being served.

#### **II. PROJECT IMPLEMENTATION**

11. Below is a list of activities and strategies that are often associated with the *planning* phase of a TOP project. Use column A to indicate if a given activity was proposed by your project. If yes, use column B to indicate the extent to which the activity was implemented.

		-	۸.		E	3.	
	Planning	Proposed?		Extent of Implementation			
	Planning	Yes	No	Never impleme nted	Less than planned	Same as planned	More than planned
a)	Conduct a community assessment to gain a better understanding of the population to be served.	1	2	1	2	3	4
b)	Evaluate the capabilities and limitations of an existing information/communications						
c)	system or network	1	2	1	2	3	4
d)	organizations	1	2	1	2	3	4
e)	conferencing with public broadcast facilities). Conduct a media campaign to increase awareness of the value of the information	1	2	1	2	3	4
f)	infrastructure	1	2	1	2	3	4
٠,	beneficiaries	1	2	1	2	3	4

12. Below is a list of activities and strategies that are commonly used by TOP projects to promote *access* to the information infrastructure. Use column A to indicate if an activity was proposed by your project. If yes, use column B to indicate the extent to which the given activity was implemented.

Access			A. Proposed?		B. Extent of Implementation			
	Access	Yes	No	Never impleme nted	Less than planned	Same as planned	More than planned	
a)	Create a network to refurbish and/or distribute							
	donated computer equipment	1	2	1	2	3	4	
b)	Establish a resource center or centralized							
	location for information exchange	1	2	1	2	3	4	
c)	Provide information or services to meet							
	community needs via the World Wide Web	1	2	1	2	3	4	
d)	Establish access sites for reaching the							
	information infrastructure	1	2	1	2	3	4	
e)	Provide mobile access to the information							
	infrastructure	1	2	1	2	3	4	
f)	Develop an alliance for better access to							
	technology	1	2	1	2	3	4	
g)	Provide Internet services through an							
	established Internet service provider (ISP)	1	2	1	2	3	4	
h)	Create electronic town meetings	1	2	1	2	3	4	
i)	Establish an economic development network	1	2	1	2	3	4	
j)	Establish an employment and job training							
	network	1	2	1	2	3	4	
k)	Establish a network to provide government							
	services	1	2	1	2	3	4	
l)	Establish a network to provide educational							
	services	1	2	1	2	3	4	
m)	Establish a network to provide health services .	1	2	1	2	3	4	
n)	Establish a network to provide public safety							
	services	1	2	1	2	3	4	
o)	Create a new entity to provide							
	telecommunications services	1	2	1	2	3	4	

13. Below is a list of technology-related activities and strategies that are commonly used by TOP projects. Use column A to indicate if a given activity was proposed by your project. If yes, use column B to indicate the extent to which the given activity was implemented.

		A. Proposed?		B.				
	Tochnology			Extent of Implementation				
	Technology	Yes	No	Never impleme nted	Less than planned	Same as planned	More than planned	
a)	Connect new community-based							
,	organizations and agencies to existing							
	network	1	2	1	2	3	4	
b)	Establish links between existing							
,	networks	1	2	1	2	3	4	
c)	Extend the area covered by an existing							
	network	1	2	1	2	3	4	
d)	Upgrade the hardware capabilities of an							
	existing network	1	2	1	2	3	4	
e)	Create a distributed network of hub							
	sites	1	2	1	2	3	4	
f)	Integrate disparate telecommunications							
	systems (such as video conferencing with							
	public broadcast facilities)	1	2	1	2	3	4	
g)	Develop new interface technology and							
	accessible media (e.g., video-on-demand)	1	2	1	2	3	4	
h)	Establish new network by creating links							
	between disparate databases, programs,							
	agencies, or organizations	1	2	1	2	3	4	
i)	Create an interactive network for distance							
	learning, teleconferencing, or telemedicine	1	2	1	2	3	4	
j)	Develop a new database or link existing							
	databases to the Internet	1	2	1	2	3	4	

14. Below is a list of activities and strategies that are commonly used by TOP projects to train end users in the use of telecommunications technologies. Please use column A to indicate if a given activity was proposed by your project. If yes, use column B to indicate the extent to which the given activity was implemented.

			۹.	В.					
			Proposed?		Extent of Implementation				
	Training	Yes	No	Never impleme nted	Less than planned	Same as planned	More than planned		
a)	Provide computer hardware needed to meet education and training needs	1	2	1	2	3	4		
b)	Establish a training and resource center	1	2	1	2	3	4		
c)	Provide onsite education and training	1	2	1	2	3	4		
d)	Create a network of certified trainers	1	2	1	2	3	4		
e)	Develop a system for electronic/online self-training	1	2	1	2	3	4		
f)	Develop training materials (print, video, electronic)	1	2	1	2	3	4		
g)	Use a "train-the-trainer" approach	1	2	1	2	3	4		

15. Did any of the following obstacles or impediments prevent you from carrying out the activities as well as you might otherwise have done?

		Yes	No
Or	ganizational problems		
a)	Inadequate or underqualified staffing	1	2
b)	Excessive staff turnover	1	2
c)	Communication problems/misunderstandings of roles	1	2
ď)	Lack of commitment and follow-through on the part of partners and/or		
-,	community stakeholders	1	2
e)	Difficulty obtaining matching funds	1	2
,		•	_
Pla	anning problems		
f)	Underestimated the resources needed	1	2
g)	Underestimated the amount of effort/time required	1	2
h)	Outdated, insufficient, or poor quality data/information to work with	1	2
i)	Necessary information was proprietary	1	2
Te	chnology Problems		
j)	Lack of availability of technology (within budget)	1	2
k)	Technology not performing as expected	1	2
I)	Delays purchasing or receiving equipment	1	2
m)	Delays due to difficulties gaining line connection	1	2
n)	Delays in installing equipment	1	2
0)	Delays due to incompatibility problems with technology	1	2
,		•	_
Ot	her problems		
p)	(specify)	1	2
q)	(specify)	1	2

	•	• •		
	7.0	Skip to	e with Q <sup>*</sup> Q20)	17-Q19)
Please	e describe any spin-off activities and	the add	ditional se	ervices being provided.
-				
DIAGO	identity the trinding sources for you	ıır snın-		
specify	· · · · · · · · · · · · · · · · · · ·	ar opin	on activit	ties. (Circle one on each line. If yes,
	· · · · · · · · · · · · · · · · · · ·	Yes	No No	ties. (Circle one on each line. If yes,  Specify
	Funding source	·		
specify	Funding source	Yes	No	
a)	Funding source  Health care organization  Education organization	Yes 1	No 2	
a) b)	Funding source  Health care organization  Education organization	Yes 1	No 2 _ 2	
a) b) c)	Funding source  Health care organization  Education organization  Public safety organization  Governmental organization	Yes 1 1 1	No 2 _ 2 _ 2 _ 2	
a) b) c) d)	Funding source  Health care organization  Education organization  Public safety organization  Governmental organization	Yes 1 1 1 1 1	No 2 _ 2 _ 2 _ 2 _ 2 _ 2	
a) b) c) d) e)	Funding source  Health care organization  Education organization  Public safety organization  Governmental organization  Community organization	Yes 1 1 1 1 1	No   2   2   2   2   2   2   2   2   2	
a) b) c) d) e)	Funding source  Health care organization  Education organization  Public safety organization  Governmental organization  Community organization  Private sector organization	Yes 1 1 1 1 1 1 1	No 2 _ 2 _ 2 _ 2 _ 2 _ 2 _ 2 _ 2 _ 2 _ 2	

# **III. PROJECT SUSTAINABILITY**

V	Nha	at is the current status of your project?				
	a) b)	In full operation	1	(Continue with C	(21)	
	c)	changed/grown/expanded considerably from that outlined in the original proposal	2	(Continue with C	(21)	
		services but affecting fewer end users than intended	3	(Skip to Q22)		
	d)	In partial operation serving the full scope of end		, ,		
	e)	users but providing a limited range of services  No longer in operation		(Skip to Q22) (Skip to Q22)		
		ojects answering "a" or "b" for item 20) Please identil oth and expansion:	fy an	y factors that faci	litated yo	our proje
			-			
		(Proceed to item 23)				
		ojects answering "c," "d," or "e" for item 20) Which o	of the	e following factors	s are resp	oonsible
			of the	e following factors	are resp	oonsible <b>No</b>
tł		ojects answering "c," "d," or "e" for item 20) Which oroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope	rable	e, unreliable,	Yes	No
tł	he p	ojects answering "c," "d," or "e" for item 20) Which oproject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable	e, unreliable, r alternatives	Yes	<b>No</b> 2
tł	he p	ojects answering "c," "d," or "e" for item 20) Which or operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable oette	e, unreliable, r alternatives	Yes	No
tł	a) b)	Dijects answering "c," "d," or "e" for item 20) Which of project no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable  pette reste	e, unreliable,r alternativesd are no longer	Yes	No 2 2 2 2
tl	a) b)	Dijects answering "c," "d," or "e" for item 20) Which obroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable  pette reste	e, unreliable, r alternatives d are no longer	Yes	No 2 2 2 2 2
tl	a) b) c)	Dijects answering "c," "d," or "e" for item 20) Which of project no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable  pette reste	e, unreliable, r alternatives d are no longer	Yes	No 2 2 2 2 2 2 2
tl	a) b) c) d)	Dijects answering "c," "d," or "e" for item 20) Which obroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable	e, unreliable, r alternatives d are no longer	Yes	No 2 2 2 2 2 2 2 2
tl	a) b) c) d) e)	Dijects answering "c," "d," or "e" for item 20) Which obroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable	e, unreliable, r alternatives d are no longer	Yes	No 2 2 2 2 2 2 2 2 2 2 2
tl	a) b) c) d) e) f)	Dijects answering "c," "d," or "e" for item 20) Which obroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable	e, unreliable,r alternativesd are no longer	Yes	No 2 2 2 2 2 2 2 2 2 2 2
t	a) b) c) d) e) f) g)	Dijects answering "c," "d," or "e" for item 20) Which obroject no longer operating at full capacity?  Mechanical obsolescence (equipment became inope worn out)	rable	e, unreliable,r alternativesd are no longer	Yes	No 2 2 2 2 2 2 2 2 2 2 2

# IV. IMPACT OF TOP GRANT

23.	What do you believe would have been the most likely outcome of your project if you did not receive Federal funds through the TOP program?
	The project would probably never have been implemented
24.	How do you believe the absence of TOP funding would have affected the range of services offered by your project?
	The project would still be able to offer the full range of services
25.	How do you believe the absence of TOP funding would have affected the scale of your project?
	The project would still have reached an equivalent number of people
26.	How do you believe the absence of TOP funding would have affected the implementation schedule for your project?
	The project would still have been implemented on the same schedule

# V. COMMUNITY INVOLVEMENT

27.	How many organizations served as a partner* in your project?	
	l	
	*NOTE: A partner is any organization that (1) provides financial support to the prodonates, or provides discounts on equipment or supplies for project-related activities; expertise (e.g., in the form of consultants, engineers, attorneys, programmers, softw system professionals) or services (e.g., telecommunications providers) to the project donates building/office space to the project. A project partner can also be a subrecipie	(3) contributes are engineers, t; (4) loans or
28.	How many of these partner organizations had a prior working relationship with the grant recipient organization?	
29.	Please specify the total number of partners from each organization type listed below. S classification that best describes the organization type for each partner so that the sur equal to the total number of partners reported in item 27 above. Use "0" to indicate that partners of a given type. <b>DO NOT LEAVE ANY SPACES BLANK.</b>	n of rows a-e is there were no Number of
	Organization type	Partners
	Health care organizations	
	a) Medical school	
	b) Hospital	
	c) Professional association	
	d) Clinic, medical center, or specialized practice	
	e) Public health agency	
	f) Other health car entity (specify)	
	Education Organizations	
	g) Early childhood org	
	h) K-12 school or school system	
	i) Higher education institution	
	j) Adult education org	
	k) Other education entity (specify)	
	Public safety organization	
	I) Law enforcement agency or department	
	m) Fire/rescue/emergency agency or department	
	n) Other public safety entity (specify)	
	Government agency	
	o) State government agency	
	p) County government agency	
	q) City or municipal agency	
	r) Tribal government	
	s) Other government agency	
	Community organization	
	t) Library	
	u) Museum or other cultural entity	
	v) Community development organization	
	w) Public broadcast organization	
	x) Other community organization or entity (specify)	
	Nonprofit Organizations	
	y) Private foundations or institute	
	,,	

	Z) ASSOCIATION	
	aa) Other nonprofit organization (specify)	
	Private Sector Organizations	
	bb) Independent telephone company	
	cc) Cable company	
	dd) Regional Bell Operating company	
	ee) Computer hardware company	
	ff) Computer software company	
	gg) Internet Service Provider	
	hh) Commercial broadcasting organization	
	ii) Other private entity (specify)	
	Other Organization Type (specify)	
30.	Please specify the total number of partners providing each service or resource listed below indicate that there were no partners providing a given service or resource. <b>DO NOT SPACES BLANK.</b>	
	Service or recourse provided	Number of Partners
	Service or resource provided	Parmers
	a) Funding	
	b) Equipment or equipment discounts	
	c) In-kind or reduced rates for services	
	d) Personnel	
	e) Space or facilities	
	f) Data access	
	,	
	g) Expertise or intellectual capital	
	h) Other (specify)	
31.	Have your relationships with partner organizations changed as a result of this project? in the types of activities conducted jointly, the ways in which joint activities are conducted future interaction?	
	Yes (Please describe how the partnerships have changed.)	1
	No	2
	110	2

# VI. PROJECT TECHNOLOGY

		Yes	No
	a) Dial-up telephone lines and modems	1	2
	b) Wireless services (e.g., cellular, PCS, microwave)		2
	c) Satellite services		2
	d) Cable modems		2
	e) Digital services (e.g., ISDN, DSL, T1, 56K)		2
	f) Other (specify)		2
3.	Which of the following devices has your project made available to your end users'	?	
		Yes	No
	a) Personal computers	. 1	2
	b) Network computers	. 1	2
	c) Television-connected device (e.g., Web TV)	. 1	2
	d) Personal digital assistant (e.g., hand-held computer device)	. 1	2
	e) Video teleconferencing unit	. 1	2
	f) Other (specify)	1	2
	Yes		
	Through which of the following types of Internet service providers do your projec to the Internet?		
5.		<b>Yes</b> . 1	No
5.	a) Commercial Internet convice provider (ISD)		2
5.	a) Commercial Internet service provider (ISP)      b) Nonprofit community notwork		2
5.	b) Nonprofit community network	. 1	2
5.	b) Nonprofit community network	. 1 . 1	2
5.	b) Nonprofit community network c) University network d) K-12 school network	. 1 . 1 . 1	2 2
5.	b) Nonprofit community network c) University network d) K-12 school network e) State or local government network	. 1 . 1 . 1	2 2 2
5.	b) Nonprofit community network c) University network d) K-12 school network	. 1 . 1 . 1 . 1	2 2

36.	In column A, indicate whether project equipment or resources were housed in each of the listed
	settings. For each of the settings designated as housing project equipment or resources, specify in
	column B the number of distinct facilities or implementation sites that were involved.

		A. Equipment setting		B. Number of sites
		Yes	No	311.03
a) b) c)	K-12 school or school district	1 1	2 2 2	
d) e)	Hospital, clinic, or other health care organization .  Fire and rescue department/agency	1	2 2	
f) g) h)	Law enforcement department/agency  Community center  Government building	1 1 1	2 2 2	
i) <sup>'</sup> j)	Nonprofit organization or entity  Private sector organization or entity	1 1	2	
k) l) m)	Mobile vehicle  Private home or residence  Other (specify)	1 1 1	2 2 2	


# VII. PROJECT EVALUATION

38.	Which of the following data	collection methods w	vere used to evaluate your project?
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		Yes	No
a)	Survey	1	2
b)	Case studies	1	2
c)	Participant observation	1	2
d)	Interviews	1	2
e)	Focus groups	1	2
f)	Document review	1	2
g)	Website monitoring	1	2
h)	Monitoring of information requests	1	2
i)	Pre/post-testing	1	2
j)	Site visits	1	2

#### 39. Which of the following types of data did you collect about your project?

		Yes	No
a)	End user's satisfaction with your project's		
	information/telecommunications services or activities	1	2
b)	Other beneficiaries' satisfaction with your project's		
	information/telecommunications services and activities	1	2
c)	Project staff's (or service providers') satisfaction with the		
	project's services and activities	1	2
d)	Intended end users who refused to use your project's		
	information/telecommunications services or resources	1	2
e)	Intended end users who rarely or reluctantly made use of		
	your project's information/telecommunications services or		
	resources	1	2
f)	The effectiveness with which information/telecommunications		
	services are now being provided	1	2
g)	Project benefits on end users	1	2
h)	Project benefits on other beneficiaries of project services	1	2

10	Do you have a	a accordated avaluation	ranart that aan	he chered with	athere interests	مريمير ما لم	nrainat1
40.	Do you have a	a completed evaluation	report that can	be shared with	others interested	a in vour	Diolect:

Yes	•
No	2

#### **VIII. PROJECT DISSEMINATION**

41.	Do	you f	feel	that	your	project	can	serve	as	а	replicable	model	for	other	similar	organizations	or
	pa	artner	ship	s to f	ollow	?											

Yes	1
No	2

- 42. We are interested in assessing the likelihood that the innovations introduced by your project will be adopted by other organizations. Please indicate the extent to which you agree with each of the following statements about whether your project might serve as a replicable model for others. Indicate your agreement using a 1-to-5 scale, in which
  - 1 = Strongly agree
  - 2 = Moderately agree
  - 3 = Neither agree nor disagree
  - 4 = Moderately disagree
  - 5 = Strongly disagree
  - NA = Not applicable

				Neither			
		Strongly	Moderatel	agree nor	Moderatel	Strongly	Not
		agree	y agree	disagree	y disagree	disagree	applicable
a)	The innovation brought about by this project provides a marked advantage over alternative ways to provide similar services	1	2	3	4	5	NA
b)	The advantages of the innovation introduced in this project are easily documented, demonstrated, and communicated to others	1	2	3	4	5	NA
c)	Project equipment and resources are not threatening or intimidating to	· ·	2	3	4	5	IVA
d)	The project's innovation makes the information infrastructure easier to understand and use than it would be	1	2	3	4	5	NA
e)	otherwise  The innovation brought about by this project can be easily implemented by others with a reasonable amount	1	2	3	4	5	NA
	of effort and expense	1	2	3	4	5	NA

43.	Please indicate approximately how many different organizations received information and/or technic assistance relating to your project through each of the following dissemination categories:								
	b) C c) R d) M e) A f) In g) Li h) S i) M	asual conversation asual Internet correspondence esponses to unsolicited requests eeting, conference, or other event rticle, report, or other written publication ternet website stserve, newsgroup, or electronic bulletin board ite visits, tours, or technology demonstrations arketing efforts and advertising echnology fairs, job fairs, or other community events							
44.		nowledge, how many of the organizations receiving information about your implemented similar projects or project-related ideas?							
45.	possibl	st the name and location of each organization adopting ideas from your project and, if e, the name and number of a contact person at each organization. If the organization name own, write down the type of organization. (Attach additional sheets of paper if necessary.)							
	1)								
	2)								
	3)								
	4)								

#### IX. INFORMATION ABOUT THE GRANT RECIPIENT

	ORGANIZA	TION TY	PES
Health	care organizations	Gover	nmental organizations
	Medical school		State government agency
	Hospital		County government agency
	Professional association		City or municipal government
14	Clinic, medical center, or specialized		Tribal government
	practice		Other governmental entity (specify)
15	Public health agency		
16	Other health care entity (specify)		
		Comm	unity organizations
		51	Social service agency
Educa	tion organizations	52	Library
21	Higher education institution or	53	Museum or other cultural entity
	consortium	54	Community development organization
22	K-12 school or school system	55	Public broadcasting station
	Adult education organization	56	Other community organization or en
	Local education agency		(specify)
25	Other education entity (specify)		
Public	safety organizations		
	Law enforcement agency or department		
	Fire and rescue agency or department		
33	Emergency agency or department		
34	Professional organization		
34	Other public safety entity (specify)		

Name		Convenient days/ti if nece	
Title		Day	Time
Telephone (with area code)			☐ a.m. ☐ p.m.
E-mail address			☐ a.m. ☐ p.m.
			□ a.m. □ p.m.
			☐ a.m. ☐ p.m.
			☐ a.m. ☐ p.m.
			☐ a.m. ☐ p.m.
THANK YOU FOR ASS YOUR TIME AND EF			
Please return this questionnair	e in th	ne enclosed enve	elope or send to:

47. Please give your name, title, telephone number, e-mail address, and the most convenient days/times to reach you. The information will be used only if it is necessary to clarify any of your responses.

**TOP Evaluation**